Remarks

The final office action of November 25, 2008 has been carefully reviewed. In response to this office action, claims 1, 10 and 18 have been amended. Claims 1-23 are currently pending and presented for review. Favorable reconsideration and allowance are respectfully requested in light of the remarks which follow.

Claim Rejections – 35 U.S.C. § 103(a)

Claims 1-3, 8, and 14-19

Claims 1-3, 8, and 14-19 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Thibault, U.S. Pat. No. 6,799,195, in view of Stawikowski, U.S. Pub. No. 2002/0046239. Claims 1 and 18 have been amended in response to the Examiner's comments in an attempt to put this application in condition for allowance.

Claims 1 and 18 have been amended to distinctly identify that the network signal is *transmitted* over the control network according to the protocol of the control network and not according to a TCP/IP protocol. In the Examiner's Response to Arguments on page 19 of the Office Action, the Examiner distinguishes between formatting a network signal and transmitting a network signal. Consequently, Applicant has amended claims 1 and 18 to identify that the network signal is transmitted over the control network according to the protocol of the control network and not according to a TCP/IP protocol.

This amendment adds no new matter and is fully supported by the specification. Figure 1 illustrates, and paragraphs 28 and 29 discuss, the two separate protocol stacks used according to the present claims. The Internet stack is identified by reference numerals 44, 46, and 48 while the internal stack is identified by reference numerals 56 and 58.

Further, Applicant respectfully submits that no additional searching is required as a result of this amendment. The Examiner has already indicated that the SOAP protocol disclosed by Stawikowski uses both the Internet transport layer and the network layer for

transmission (Response to Arguments, page 19) and that Thibault does not explicitly teach the limitation requiring the network signal be formatted according to a control network protocol (page 4, 1st paragraph of Office Action).

Applicant also respectfully disagrees with Examiner's assertion that the use of the transport and network layers does not concede that a protocol is formatted in these layers. It is inherent in a TCP/IP transport layer and network layer that additional formatting is added to a message as the message passes down through each layer of the transmitting device. The formatting is subsequently removed by the receiving device as the message passes back up through each layer of the receiving device. Therefore, although the SOAP protocol may be initially formatted in the application layer, additional formatting is performed in each of the transport and network layers as a message is transmitted using these layers. Nevertheless, Applicant has amended claims 1 and 18, in an attempt to put this application in condition for allowance, by explicitly stating that the network and transport layers are not being used for transmission, and a notice of allowance is respectfully requested.

Claims 4-7, 9, and 20-23

Claims 4-7, 9, and 20-23 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Thibault in view of Stawikowski, and further in view of Kastner, U.S. Pat. No. 6,311,101. Claims 4-7 and 9 depend on claim 1 and claim 20 depends on claim 18. Because Kastner fails to cure the deficiencies of Thibault and Stawikowski as disclosed above, Applicant submits that for at least the above-stated reasons, claims 4-7, 9, and 20 are similarly in condition for allowance.

Before discussing the merits of the rejection of claim 21, it may be helpful to look first at the structure of a layered communication protocol. Two of the most common models for layered communication protocols are the TCP/IP model and the OSI models. The TCP/IP model is often considered a subset of the OSI model. Consequently, both models include many similarities as illustrated in the tables presented below.

TCP/ IP Model

5	Application
4	Transport
3	Network
2	Data Link
1	Physical

OSI Model

7	Application
6	Presentation
5	Session
4	Transport
3	Network
2	Data Link
1	Physical

The stack layers of particular relevance to the present application are the Data Link Layer, the Network Layer, and the Transport Layer (Layers 2-4 in both tables). It is well known in the art that the Transmission Control Protocol (TCP) and the Internet Protocol (IP) are handled in the Transport Layer and the Network Layer, respectively. It is similarly well known that Media Access Control (MAC) is performed within the Data Link Layer. The merits of the rejection of claim 21 will be discussed in light of these characteristics of layered communication protocols.

Applicant submits that the Examiner has not met the burden of proof to establish a prima facie case of obviousness with respect to claim 21. Claim 21 recites in part the limitations listed below.

> from claim 21
> "processing an *Internet media access control protocol* and a *TCP/IP protocol* with respect to the request signal by way of an Internet communications program of the web access interface, in order to extract socket API data in the form of a socket API signal;
>
> . . .
>
> formatting the socket API signal in accordance with a *control network protocol* and an *internal media access control protocol* to produce a network signal;"

Examining the italicized portions of the claim limitations, claim 21 clearly contemplates two distinct communications stacks. The first paragraph identifies an Internet MAC and a TCP/IP protocol, which correspond to layers 2-4 of either layered communication model previously presented. The claim continues by identifying an internal MAC and a control network protocol which correspond to a data link and a network layer of a second communication stack. It is a well established principle of claim construction that different language identifies different elements within a claim. Therefore, the internal MAC and control network protocol must identify a different communication stack than the Internet MAC and the TCP/IP protocol recited earlier in the claim.

Thibault, Stawikowski, and Kastner do not disclose the use of multiple communication stacks. The Examiner acknowledges that Thibault and Stawikowski fail to disclose this structure but cites Kastner as disclosing such a structure (Office Action, page 10). However, Applicant respectfully submits that Kastner similarly fails to disclose such a structure. Kastner identifies multiple interfaces connecting to a network (i.e. LAN interfaces 113 and 121, HTTP-server 157, and web browsers 163, 173, 183); however, each interface uses identically structured communication stacks. In each case, the TCP/IP protocol is used (col. 6 lines 62-64). In contrast, the present claims identify two distinct communication stacks.

Further, it would not be obvious from the cited references to use multiple communication stacks. As the Examiner has identified and as taught by Kastner, it is advantageous to use Ethernet and the TCP/IP protocol to use standard Ethernet components (col. 6, lines 6-8). Kastner also demonstrates that a single type of communication stack is typically used such that hardware and software may be reused throughout an application. Reusing hardware and software can reduce development and production costs. Consequently, Applicant submits that claim 21, as well as claims 22-23 which are dependent on claim 21, is in condition for allowance.

Claims 10

Claim 10 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Thibault in view of Stawikowski and Keeley, U.S. Pat. No. 5,966,519. Claim 10 has been amended in the same manner as claim 1 as described above. Because Keeley fails to cure the deficiencies of Thibault and Stawikowski, Applicant submits that for at least the above-stated reasons, claim 10 is similarly in condition for allowance.
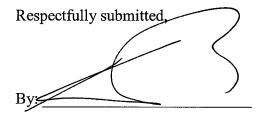
Claims 11

Claim 11 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Thibault, Stawikowski, and Keeley, in view of Kastner. Claim 11 depends on claim 10. Because Kastner fails to cure the deficiencies of Thibault, Stawikowski, and Keeley as disclosed above, Applicant submits that for at least the above-stated reasons, claim 11 is similarly in condition for allowance.

Claims 12-13

Claims 12-13 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Thibault in view of Stawikoski as applied to claim 1, and further in view of Kalajan, U.S. Pat. No. 6,006,258. Claim 12-13 depend on claim 1. Because Kalajan fails to cure the deficiencies of Thibault and Stawikowski as disclosed above, Applicant submits that for at least the above-stated reasons, claims 12-13 are similarly in condition for allowance.

Conclusions

In light of these remarks and amendments, it is believed that claims 1-23 are now in condition for allowance and allowance is respectfully requested. The Examiner is encouraged to contact the undersigned if minor amendments are needed in the figures, specification, or claims to bring this case into allowance.

Respectfully submitted,

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